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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/686,526

10/16/2003

Shigeru Kurosawa

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7590

12/14/2007

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EXAMINER

ROSARIO, DENNIS

ART UNIT

PAPER NUMBER

2624

MAIL DATE

DELIVERY MODE

12/14/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/686,526

Applicant(s)

KUROSAWA, SHIGERU

Examiner

Dennis Rosario

Art Unit

2624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on RCE 10/3/07.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/3/07 has been entered.

Response to Amendment

2. The amendment was received on 10/3/07. Claims 1-20 are pending.

Response to Arguments

3. Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-5, 10, 12-15, 18 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Saruwatari (US Patent 5,912,705).

Regarding claim 1, Saruwatari discloses a portable communication apparatus (fig. 1) comprising:

- a) an image-capturing section (fig. 1,num. 11) for capturing an image depending on an operation of a shutter key and for sensing images in real-time;
- b) a display (fig. 1,num. 17) that includes a viewfinder display ("viewfinder" in col. 2, line 24) that displays said real-time sensed images and that includes a reference frame (fig. 4C,num. 42b) that indicates a predetermined optimal size (or "predetermined portion" in col. 8, line 35) of characters to achieve a predetermined success rate for character recognition for a character positioned within the reference frame (the remaining limitations of limitation b) are not given weight since functional limitation are not given weight in an apparatus claim); and
- c) a character recognition section (fig. 1,num. 15) for recognizing a character from a captured image.

Regarding claim 2, Saruwatari discloses the portable communication apparatus according to claim 1, wherein said display further displays the captured image, wherein said display further comprises a character-size adjustment indicator (fig. 5: S12) that includes the reference frame such that a user moves said portable communication apparatus to image at least a portion of the characters of said captured image to fit approximately into said reference frame.

Regarding claim 3, Saruwatari discloses the portable communication apparatus according to claim 2, wherein the character-size adjustment indicator appears on the display when the portable communication apparatus is set to a character recognition mode (represented in fig. 5 as numeral S2).

Claim 4 structural limitations were addressed in claim 2 and includes intended use which is not given weight in an apparatus claim.

Regarding claim 5, Saruwatari discloses the portable communication apparatus according to claim 2, wherein the reference frame (fig. 4C,num. 42b) is a rectangle (as shown in fig. 4C,num. 42b) and is oriented horizontally (as shown in fig. 4C,num. 42b) with respect to the display.

Regarding claim 10, Saruwatari discloses the portable communication apparatus according to claim 1, further comprising:

- a) a memory (fig. 1,num. 14) storing a plurality of recognition criterion (or character recognition program that has recognition criteria for each of "pictorial symbols, foreign languages and ruled lines" in col. 9, lines 16,17) each corresponding to a different type of character string;

- b) wherein the character recognition section uses one of the plurality of recognition criterion to recognize a character from the captured image.

Regarding claim 12, Saruwatari discloses a data input method in a portable communication apparatus having an image-capturing function of capturing an image, the method comprising:

- a) capturing an image (fig. 1,num. 11) depending on an operation of a shutter key (fig. 1,num. 12); and
- b) recognizing a character (fig. 1,num. 15) from a captured image to enter (to fig.1,num. 19 using the signal between fig. 1,numerals 15 and 19 for entering) the character as input data,
- c) wherein said portable communication apparatus comprises a viewfinder display ("viewfinder" in col. 2, line 24) that displays images sensed in real-time and a reference frame (corresponding to one of "plurality of areas" in col. 5, line 67) that indicates an optimal size (corresponding to fig. 6: S16 that goes through an iterative process until a set of criteria is met as represented as the output "YES" of said S16) for characters to achieve a predetermined success rate for character recognition (corresponding to "achieving the higher speed and higher accuracy of character recognition" in col. 3, lines 43,44 which means that Saruwatari's invention was designed or predetermined to have an accurate or successful recognition with a faster rate or speed of recognition in addition to being accurate or successful) of a character positioned within the reference frame, and
- d) wherein said recognizing a character recognizes a character (as represented in fig. 4C,num. 42 which corresponds to said one of plurality of areas) positioned within said reference frame (fig. 4C,num. 42) when said image is captured.

Regarding claim 13, Suwatari discloses a method for recognizing characters in a portable communication apparatus having an image-capturing device and a display, the method comprising:

- a) setting (as shown by the shaded portion of fig. 8G) a character-size adjustment indicator (said shaded portion that indicates a size in fig. 6:S16) on the display, wherein the character-size adjustment indicator comprises a reference frame (said shaded portion) having a size which provides a sufficiently high success rate (corresponding to the YES output of fig. 6: S16) in character recognition when one or more characters are approximately fitted into said reference frame;
- c) capturing an image (fig. 8D, num. 81) depending on an operation of a shutter key (fig. 1,num. 12) when a character displayed on the display fits into the reference frame;
- d) recognizing the character (fig. 1,num. 15) within the reference frame from a captured image; and
- e) displaying a recognized character (fig. 5:S11) in a predetermined display area ("predetermined portion" in col. 8, line 35) on the display (fig. 4C, num. 41).

Regarding claim 14, Suwatari discloses the method according to claim 13, wherein the capturing an image comprises:

- a) image-processing (fig. 1,num. 13) the captured image to produce a processed image (fig. 4A,num. 41);
- b) clipping out (as shown in fig. 4A: SS2) a portion of the processed image within the reference frame (fig. 4A,num. 42); and
- c) recognizing the character (fig. 1,num. 15) from the clipped portion of the processed image.

Claim 15 is rejected the same as claim 14. Thus, argument similar to that presented above for claim 14 is equally applicable to claim 15.

Claim 18 is rejected the same as claim 10. Thus, argument similar to that presented above for claim 10 is equally applicable to claim 18.

Claim 20 is rejected the same as claim 13. Thus, argument similar to that presented above for claim 13 is equally applicable to claim 20 except for the additional limitation of a medium as disclosed in Saruwatari in fig. 1,num. 14.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 6-8 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saruwatari (US Patent 5,912,705) in view of Kubo et al. (US Patent 6,639,626 B1).

Regarding claim 6, Saruwatari teaches a photo-taking switch in fig. 1, num. 12 that captures a picture when activated.

Kubo teaches a shutter button in fig. 13,num. 74 along with a timer in fig. 13,num. 75 and claim 6 of:

a) a timer (fig. 13,num. 75) that delays an image-capturing operation of the image-capturing section (fig. 13,num. 52) by a predetermined time period after an operation of the shutter key (fig. 13,num. 74) has been completed.

It would have been obvious at the time the invention was made to one of ordinary skill in the art to modify Saruwatari's photo-taking switch with Kubo's shutter button, because Kubo's teaching is able to avoid problems with quick moving objects in col. 1, lines 1-15.

Regarding claim 7, Kubo of the combination teaches the portable communication apparatus according to claim 6, wherein the predetermined time period is set through an input device (fig. 8,num. 64) of the portable communication apparatus.

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Claims 8 and 17 are rejected the same as claim 6. Thus, argument similar to that presented above for claim 6 is equally applicable to claims 8 and 17.

8. Claims 9,11,16 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saruwatari (US Patent 5,912,705) in view of Horii et al. (US Patent Application Publication No.: (US 2002/0058536 A1).

Regarding claim 9, Saruwatari teaches that cameras are used for character recognition in the related background art section in col. 1, lines to 20 to col. 2, line 15.

Horri teaches a camera that is used for character recognition and claim 9 of

- a) a program memory (fig. 1F, num. 151) storing a plurality of programs including a mailer program (fig. 7A, num. 515) and a browser program (fig. 7A, num. 509); and
- b) a processor (fig. 1F,num. 150) for executing at least one program, wherein
- c) the processor starts the mailer program when a string of the recognized characters represents an e-mail address (corresponding to fig. 7A,num. 515),
- d) the processor starts the browser program when a string of the recognized characters represents a URL (uniform resource locator) (corresponding to fig. 7A,num. 509), and
- e) the processor starts making a call at the phone number when a string of the recognized characters represents a phone number (corresponding to fig. 7A,num. 507).

It would have been obvious at the time the invention was made to one of ordinary skill in the art to modify Saruwatari's teaching of camera's that use character recognition with Horri's teaching of a camera with character recognition, because Horri's camera enables "eas[y]" in paragraph [0099], line 9 communication.

Claim 11 is rejected the same as claim 10. Thus, argument similar to that presented above for claim 10 is equally applicable to claim 11.

Regarding claim 16, Horri discloses the method according to claim 13, further comprising:

a) repeating capturing an image (corresponding to fig. 9A and 9B), recognizing the character (fig. 9B,num. 572) , and displaying a recognized character (fig. 9D) by sequentially selecting portions of a string of characters displayed on the display (as done in figures 9A and 9B), each portion including a character which fits into the reference frame, wherein a plurality of recognized characters are displayed on the display by combining the portions in series, each of which includes a recognized character.

Claim 19 is rejected the same as claim 9. Thus, argument similar to that presented above for claim 9 is equally applicable to claim 19.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Dance et al. (US Patent 6,922,487) is pertinent as teaching a method of using a viewfinder (fig. 9,num. 76) to recognize characters (as shown in fig. 5A) using a "bounding boxes" in col. 10, line 1 as the claimed reference frame that indicates an ideal height or the claimed optimal size of a character in fig. 2,num. 50 including the claimed predetermined success rate.

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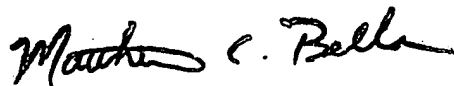
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10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dennis Rosario whose telephone number is (571) 272-7397. The examiner can normally be reached on 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Bella can be reached on (571) 272-7778. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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